TＬe

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,481	12/17/2003	Todd M. Burdine	FIS920030295	1480

32074 7590 04/19/2007		EXAMINER	
INTERNATIONAL BUSINESS MACHINES CORPORATION		DO, CHAT C	
DEPT. 18G			
BLDG. 300-482		ART UNIT	PAPER NUMBER
2070 ROUTE 52			
HOPEWELL JUNCTION, NY 12533		2193	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 December 2003 and 30 August 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>17 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>12/17/03</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and . requirements of this title.

2.   Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-12 cite a method, program storage, and system for generating a random sequence in accordance with a mathematical algorithm. In order for claims to be statutory, claims must either include a practical/physical application or a concrete, useful, and tangible result. However, claims 1-12 merely disclose steps/components for generating a random sequence without further disclosing a practical/physical application or a useful and tangible result. In addition, claims 4-5, 9, and 12 are directed to non-tangible program storage as seen in paragraph [0069] of the original disclosure. Therefore, claims 1-12 are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1, 4, 6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward

et al. (U.S. 4,142,240).

        Re claim 1, Ward et al. disclose in Figures 1-3 a method for determining the nth

state of an n-stage linear feedback shift register (LFSR) (e.g. abstract and Figure 2),

comprising: building a look-up table of n-bit states for latch positions of linear feedback

shift register (e.g. components 12-15 in Figure 3 as memory table for storing states of

LFSR); obtaining a modulo remainder of Nth state (e.g. component 16 in Figure 3 as

modulo-2 unit); and generating directly from modulo remainder and n-bit states Nth state

(e.g. component 18 in Figure 3 as output unit for code).

        Re claim 4, it is a program storage claim of claim 1. Thus, claim 4 is also rejected

under the same rationale as cited in the rejection of rejected claim 1.

        Re claim 6, it is a system claim of claim 1. Thus, claim 6 is also rejected under

the same rationale as cited in the rejection of rejected claim 1.

        Re claim 11, Ward et al. further disclose in Figures 1-3 method further

comprising responsive to Nth state, selectively executing at least one of password

generation, convergent signature analysis, secure credit card processing, system security

integration, and encryption encoding and decoding (e.g. col. 1 lines 5-15 and 52-60).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

        a.   U.S. Patent No. 4,142,240 to Ward et al. disclose a agile code gene

b.   U.S. Patent No. 5,566,099 to Shimada discloses a pseudorandom number

generator.

c.   U.S. Patent No. 5,757,923 to Koopman Jr. discloses a method of generating secret

identification numbers.

d.   U.S. Patent No. 6,934,730 to Direen Jr et al. disclose a method and system for

generating a transform.

e.   U.S. Patent Publication No. 2005/0044119 to Langin-Hooper et al. disclose a

pseudo-random number generator.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The

examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
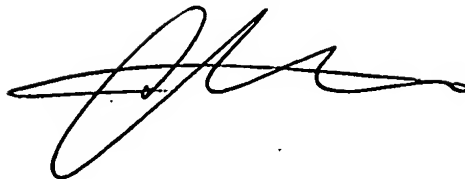

                                        Chat C. Do

Examiner
Art Unit 2193

April 16, 2007